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Unveiling novel therapeutic strategies through the lens of Igbo-African conceptualization of medicine: A scientific-philosophical exploration

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ABSTRACT

This article delves into the realm of Igbo-African conceptualization of medicine and its potential impact on the development and implementation of novel therapeutic strategies. By examining the indigenous knowledge systems, cultural beliefs, and holistic healing approaches prevalent in the Igbo-African context, we aim to uncover valuable insights that can inform and enrich contemporary medical practices. Drawing upon interdisciplinary perspectives from anthropology, ethnobotany, and medical science, we explore the intersection between traditional healing practices and modern therapeutic interventions. Through this exploration, we seek to bridge the gap between traditional knowledge and scientific advancements, ultimately leading to improved healthcare outcomes for diverse populations.

Keywords: Novel therapeutic strategies, Igbo-African conceptualization, Traditional healing practices, Cross-cultural understanding, Healthcare equity.

1. INTRODUCTION

In this scientific-philosophical exploration, we delve into the Igbo-African conceptualization of medicine and its potential to unveil novel therapeutic strategies. By examining the traditional healing practices and beliefs of the Igbo people of Africa, we aim to bridge the gap between indigenous knowledge systems and modern scientific approaches to medicine. This exploration holds the promise of expanding our understanding of healthcare and opening up new avenues for therapeutic interventions (Smith, 2019).

Background and Rationale

The Igbo people, one of the largest ethnic groups in Nigeria, have a rich tradition of healing practices and beliefs that date back centuries (Okafor, 2005). Their holistic approach to medicine combines physical, psychological, and spiritual elements to promote health and well-being. Igbo medicine is deeply rooted in the community and emphasizes the interconnectedness of individuals with their

environment and social relationships (Uchendu, 1970). Despite the advancements in modern medicine, traditional healing practices continue to be prevalent among the Igbo people and other African communities. These practices often involve the use of herbal remedies, rituals, and ancestral connections to diagnose and treat various ailments (Okafor, 2005).

The effectiveness of some of these traditional treatments has been documented, raising questions about their potential contributions to contemporary healthcare (Ezeome, 2010; Oyerinde & Aletan, 2022; AlZuyaydi & Kalevaru, 2022; Aladhab et al., 2023). By exploring the Igbo-African conceptualization of medicine, we aim to shed light on the unique perspectives, knowledge, and practices that can inform and enrich modern therapeutic strategies (Uchendu, 1970). Integrating traditional and indigenous approaches with scientific methods has the potential to unlock new insights, uncover novel treatment options, and enhance healthcare outcomes for diverse populations (Ezeome, 2010).

Objectives

The primary objectives of this exploration are:

To investigate the underlying principles and philosophies of Igbo-African medicine and its holistic approach to health and healing (Uchendu, 1970).

To identify the traditional healing practices and remedies employed by the Igbo people and their potential therapeutic applications (Okafor, 2005).

To critically examine the scientific basis and mechanisms of action behind traditional Igbo healing practices and remedies (Ezeome, 2010).

To explore how the integration of Igbo-African medicine with modern scientific approaches can lead to the development of innovative therapeutic strategies (Smith, 2019).

To discuss the implications of incorporating indigenous knowledge systems into mainstream healthcare and the challenges and opportunities associated with this integration (Smith, 2019).

By accomplishing these objectives, we aspire to foster a deeper appreciation for the value of diverse cultural perspectives on medicine and encourage the exploration of novel therapeutic strategies that can benefit individuals and communities worldwide (Okafor, 2005).

Igbo-African Conceptualization of Medicine

Historical Context and Cultural Foundations

The Igbo people are an ethnic group native to the southeastern region of Nigeria, predominantly found in present-day Anambra, Imo, Enugu, Ebonyi, and Abia states. The Igbo have a rich cultural heritage that encompasses various aspects of life, including their conceptualization of medicine (Okoye and Okoye, 2019; Onwuegbuchunam and Mbanaso, 2017). Historically, the Igbo had a deep understanding of their environment and the medicinal properties of plants and herbs. Traditional medicine played a significant role in their healthcare system long before the introduction of modern medicine. The knowledge and practices surrounding medicine were passed down through generations orally, with specialized individuals acting as healers and custodians of this knowledge (Okoye and Okoye, 2019).

Traditional Healing Practices and Belief Systems

In Igbo society, traditional healing practices were deeply rooted in a holistic view of health and wellness. The Igbo believed that health was not merely the absence of disease but a state of balance between the individual, the community, and the spiritual realm. Illnesses were considered to be caused by a disruption in this balance, whether due to spiritual, physical, or social factors (Udoeye, 2018). Traditional healers, known as dibias or ndi-ocha, played a vital role in the Igbo healthcare system. They possessed extensive knowledge of medicinal plants, herbs, and other natural remedies. These healers used their expertise to diagnose and treat various ailments, often incorporating spiritual rituals and ceremonies into their healing practices (Onwuegbuchunam and Mbanaso, 2017).

The Igbo believed in the existence of a spiritual dimension that influenced a person's health. They attributed illnesses to spiritual causes such as ancestral spirits, malevolent deities, or the influence of supernatural forces. Traditional healers would consult the spirits or deities through divination, seeking guidance on appropriate treatments and rituals to restore balance and harmony (Udoeye, 2018). Herbal remedies were commonly used in Igbo traditional medicine. Different plants and herbs were believed to possess specific medicinal properties and were used to address various ailments. Traditional healers would prepare and administer these remedies in the form of infusions, decoctions, or poultices (Okoye and Okoye, 2019).

Holistic Approaches to Health and Wellness

The Igbo approach to health and wellness was holistic, considering the interconnectedness of the physical, mental, social, and spiritual aspects of an individual's well-being. Traditional healers understood that maintaining harmony within these domains was crucial for good health. In addition to herbal remedies, traditional healers employed various other techniques to promote healing and well-being. These included massage, acupuncture, scarification (a form of controlled skin cutting), and counseling. The healing process often involved rituals and ceremonies designed to restore spiritual balance and appease the ancestral spirits or deities (Udoe, 2018).

Community support and involvement were integral to the Igbo healing process. Family and community members would contribute to the healing rituals, provide emotional support, and participate in activities aimed at restoring the individual's well-being. Healing was seen as a collective effort that extended beyond the individual, emphasizing the importance of social cohesion and communal responsibility (Onwuegbuchunam and Mbanaso, 2017). It is important to note that while traditional healing practices continue to exist within Igbo communities, modern medicine has also gained prominence. Many Igbo people now utilize a combination of traditional and modern healthcare approaches, depending on the nature of the illness and personal preferences.

Generally, the Igbo-African conceptualization of medicine encompasses a holistic understanding of health, integrating physical, mental, social, and spiritual dimensions. Traditional healing practices rooted in the use of medicinal plants, rituals, and community support remains significant in the Igbo culture, preserving their unique approach to healthcare and wellness.

2. NOVEL THERAPEUTIC STRATEGIES

Current Medical Advancements and Challenges

Current medical advancements have made significant progress in various fields of healthcare, including diagnostics, treatment, and disease management. Here are a few noteworthy advancements:

Precision Medicine: Precision medicine aims to provide personalized treatments based on an individual's unique genetic makeup, lifestyle, and environment. It involves the use of genomic information, biomarkers, and advanced diagnostics to tailor treatment plans, resulting in better outcomes and reduced side effects (National Human Genome Research Institute, 2021).

Immunotherapy: Immunotherapy has emerged as a groundbreaking approach for treating cancer and autoimmune diseases. It utilizes the body's immune system to target and destroy cancer cells or regulate immune responses in autoimmune conditions. Immunotherapies such as immune checkpoint inhibitors, CAR-T cell therapy, and monoclonal antibodies have shown promising results in clinical trials and have been approved for various indications (National Cancer Institute, 2022).

Gene Therapy: Gene therapy involves the modification or replacement of defective genes to treat genetic disorders. Recent advancements in gene-editing technologies, such as CRISPR-Cas9, have significantly enhanced the precision and efficiency of gene therapy. This approach holds great potential for treating previously incurable genetic diseases (National Human Genome Research Institute, 2022).

Despite these advancements, several challenges persist in the field of medicine:

Access and Affordability: Many innovative treatments and therapies are often expensive, making them inaccessible to a significant portion of the population. Ensuring equitable access to advanced medical care remains a challenge, particularly in lower-income regions and developing countries (World Health Organization, 2021).

Regulatory Hurdles: Bringing new therapies to market involves navigating complex regulatory frameworks, which can delay the availability of innovative treatments. Striking a balance between safety and timely access to novel therapies is an ongoing challenge for regulatory agencies (US Food and Drug Administration, 2022).

Drug Resistance: The rise of antimicrobial resistance and the development of resistance to cancer therapies pose significant challenges. Evolving pathogens and the ability of cancer cells to evade treatment strategies require ongoing research and the development of new therapeutic approaches (World Health Organization, 2021).

Exploring Alternative Therapies and Complementary Medicine

Alternative therapies and complementary medicine refer to approaches outside the realm of conventional medicine that are used alongside or instead of traditional treatments. While these practices may vary widely in terms of efficacy and scientific evidence, exploring them can offer potential benefits and complementary support in certain cases. Here are a few examples:

Acupuncture: Acupuncture, an ancient Chinese practice, involves inserting thin needles into specific points on the body. It is believed to restore the flow of energy and promote healing. Acupuncture has shown promise in managing chronic pain, nausea and vomiting, and certain mental health conditions (National Center for Complementary and Integrative Health, 2022).

Herbal Medicine: Traditional herbal remedies have been used for centuries in various cultures. Some herbal medicines, such as St John's Wort for depression or turmeric for inflammation, have demonstrated therapeutic potential. However, it's important to use caution as herbal remedies can interact with conventional medications and may not undergo the same rigorous testing as pharmaceuticals (National Center for Complementary and Integrative Health, 2021).

Mind-Body Interventions: Practices like yoga, meditation, and mindfulness techniques can promote relaxation, reduce stress, and improve overall well-being. They are often used as adjunct therapies to support conventional treatments for conditions like anxiety, depression, and chronic pain (National Center for Complementary and Integrative Health, 2022).

It is crucial to approach alternative therapies with a critical mindset, considering the available scientific evidence, consulting healthcare professionals, and ensuring their safe integration with conventional medical care.

Integrating Traditional Knowledge with Modern Science

Integrating traditional knowledge with modern science involves bridging the gap between traditional healing practices and evidence-based medicine. Traditional knowledge, accumulated over generations, offers valuable insights into the treatment and prevention of diseases. By combining this knowledge with rigorous scientific research, several benefits can be realized:

Ethnopharmacology: Traditional medicinal systems, such as Ayurveda, Traditional Chinese Medicine (TCM), or Indigenous healing practices, often utilize various plant-based remedies. Ethnopharmacology aims to explore the therapeutic properties of these plants and their active compounds, validating their efficacy and safety through scientific methods. This integration can lead to the discovery of new drugs or the development of herbal formulations that can be used alongside conventional treatments (Heinrich et al., 2020).

Traditional Medicine in Public Health: Traditional medicine systems often have a holistic approach to health, focusing on preventive measures and lifestyle modifications. Integrating traditional knowledge with public health strategies can help address health challenges at a population level, promote wellness, and reduce the burden on healthcare systems (World Health Organization, 2019).

Collaborative Research: Collaborative research initiatives between traditional healers, scientists, and healthcare professionals can foster mutual understanding and knowledge exchange. This collaboration can lead to the development of evidence-based protocols, standardized practices, and guidelines that integrate the best of traditional knowledge and modern science (Bodeker et al., 2020).

Cultural Preservation and Respect: Integrating traditional knowledge with modern science should be done in a manner that respects the cultural heritage, traditions, and practices of different communities. It is important to engage with local communities, indigenous groups, and traditional healers as equal partners, ensuring their knowledge is valued, protected, and preserved (United Nations Educational, Scientific and Cultural Organization, 2019).

Intellectual Property Rights: Integrating traditional knowledge with modern science raises questions about intellectual property rights and fair benefit sharing. It is crucial to establish mechanisms that recognize and protect the intellectual property of traditional healers and indigenous communities, ensuring they receive fair compensation for their contributions (World Intellectual Property Organization, 2021).

By combining traditional knowledge with modern science, we can tap into a vast repository of wisdom and enhance our understanding and treatment of various diseases. This integration has the potential to improve healthcare outcomes, promote cultural diversity, and foster a more inclusive and comprehensive approach to medicine.

3. CASE STUDIES AND EMPIRICAL EVIDENCE

Ethnobotanical Studies and Medicinal Plant Research

Ethnobotanical studies involve the scientific investigation of traditional knowledge and practices related to the use of plants by different cultures. These studies aim to document the traditional uses of plants for medicinal purposes and to identify potential bioactive compounds that can be used in modern medicine (Tu, 2011). Ethnobotanical research often involves collaborations between scientists, ethnobotanists, and indigenous communities. Researchers work closely with local healers and community members to understand their traditional healing practices and the plants they use. This collaborative approach helps to ensure cultural sensitivity, ethical considerations, and the protection of indigenous knowledge.

Through ethnobotanical studies, researchers have been able to identify numerous medicinal plants and their active compounds. For example, the discovery of the anti-malarial drug artemisinin from *Artemisia annua* (sweet wormwood) is a notable success story in ethnobotanical research. This compound has saved millions of lives worldwide. Ethnobotanical studies also contribute to the conservation of biodiversity. By documenting traditional knowledge about plant use, researchers can identify species that are at risk and promote sustainable practices to preserve them.

Indigenous Healing Practices and Efficacy

Indigenous healing practices encompass a wide range of traditional approaches to healthcare and well-being. These practices are deeply rooted in the cultural and spiritual beliefs of indigenous communities and have been passed down through generations (Bussmann et al., 2007). The efficacy of indigenous healing practices has been a subject of interest for researchers. Several studies have shown positive outcomes associated with these practices. For example, traditional medicinal plants and herbal remedies used in indigenous healing have been found to possess various pharmacological activities, such as antimicrobial, anti-inflammatory, and analgesic properties (Pieroni and Vandebroek, 2007).

However, it is essential to approach the evaluation of indigenous healing practices with cultural sensitivity and respect for traditional knowledge systems. Indigenous healing is often holistic and considers the interconnectedness of the individual with nature, community, and the spiritual realm. Therefore, evaluating the efficacy of these practices solely through Western scientific frameworks may not capture their full benefits. Collaborative research efforts that involve indigenous communities and traditional healers are crucial for understanding the efficacy of indigenous healing practices. Such collaborations can help bridge the gap between traditional knowledge and scientific validation while respecting the cultural context and preserving indigenous rights.

Collaborative Approaches and Community Engagement

Collaborative approaches and community engagement are integral to ethnomedicine and indigenous healing research. Engaging indigenous communities in research processes fosters mutual respect, ensures cultural sensitivity, and protects indigenous knowledge (Smith, 2012). Collaborative approaches involve partnerships between researchers, scientists, and indigenous communities. These partnerships are based on shared decision-making, knowledge exchange, and equitable participation in the research process. The involvement of indigenous communities from the project's inception helps shape research objectives, methodologies, and the dissemination of findings.

Community engagement goes beyond research participation and includes capacity building, education, and empowerment. Indigenous communities are provided with opportunities to enhance their research skills, preserve their traditional knowledge, and make informed decisions regarding healthcare practices and resource management. Effective community engagement also involves recognizing and addressing power imbalances, acknowledging the historical context of colonization and exploitation, and ensuring the equitable distribution of benefits resulting from research activities.

By adopting collaborative approaches and actively engaging with indigenous communities, researchers can contribute to the preservation of traditional knowledge, cultural revitalization, and improved healthcare outcomes. Moreover, this approach promotes ethical research practices and respects the rights and self-determination of indigenous peoples.

4. IMPLICATIONS AND FUTURE DIRECTIONS

Enhancing Cross-Cultural Understanding and Healthcare Equity

In the future, there is a growing recognition of the importance of cross-cultural understanding and healthcare equity in providing effective and equitable healthcare services. Healthcare providers are realizing that cultural factors can significantly influence a patient's health outcomes and experiences. To enhance cross-cultural understanding, several future directions can be explored:

Cultural competency training: Healthcare professionals can receive specialized training to develop cultural competency skills. This training can help them understand diverse cultural beliefs, values, and practices, enabling them to provide more sensitive and appropriate care (Betancourt et al., 2003).

Multicultural healthcare teams: Building diverse healthcare teams that reflect the cultural backgrounds of the communities they serve can foster better understanding and communication. By having professionals from different cultural backgrounds, healthcare institutions can improve the quality of care and reduce health disparities (Beach et al., 2005).

Language services: Access to interpreters and translation services is crucial for effective communication between healthcare providers and patients with limited English proficiency. Future healthcare systems should prioritize language services to ensure all

patients can effectively express their concerns and understand the healthcare information provided to them (Ngo-Metzger et al., 2007)

Culturally tailored interventions: Healthcare interventions and programs should be designed to address the unique cultural needs and preferences of specific communities. Tailoring healthcare practices to align with cultural norms and values can improve patient engagement, adherence to treatment plans, and overall health outcomes (Truong et al., 2014).

Leveraging Traditional Knowledge for Drug Discovery and Development

Traditional knowledge, accumulated over generations by indigenous and local communities, holds immense potential for drug discovery and development. It encompasses a wealth of information about the medicinal properties of plants, animals, and other natural resources. To leverage traditional knowledge for drug discovery, the following future directions can be pursued:

Collaboration with traditional healers: Researchers and pharmaceutical companies can collaborate with traditional healers and indigenous communities to document and validate traditional medicinal practices. By integrating traditional knowledge with scientific research, new leads for drug development can be identified (Heinrich and Gibbons, 2001).

Intellectual property rights and benefit sharing: To ensure equitable collaborations, it is essential to establish clear guidelines and mechanisms for protecting the intellectual property rights of traditional knowledge holders. Benefit-sharing agreements should be developed to ensure that indigenous communities receive fair compensation for their contributions to drug discovery (Posey, 1999).

Ethnopharmacological research: Ethnopharmacology is an interdisciplinary field that combines traditional knowledge with modern scientific approaches. Future research should focus on exploring the pharmacological properties of traditional remedies, identifying active compounds, and conducting preclinical and clinical studies to validate their safety and efficacy (Fabricant and Farnsworth, 2001).

Conservation and sustainable use: It is crucial to promote the conservation and sustainable use of medicinal plants and natural resources. Protecting biodiversity and the habitats of these valuable resources ensures their availability for future generations and supports ongoing research and development efforts (Shrestha et al., 2003).

Incorporating Patient-Centered Care and Cultural Competence

To enhance patient-centered care, it is crucial to customize healthcare services to suit the specific requirements, choices, and beliefs of each patient. Cultural competence plays a vital role in patient-centered care by acknowledging and valuing the cultural differences among patients. To further integrate patient-centered care and cultural competence in the future, the following approaches can be explored:

Culturally sensitive communication: Healthcare providers should develop effective communication skills that consider cultural nuances and ensure that information is conveyed in a way that patients can understand. This includes using plain language, visual aids, and appropriate interpreters when necessary (Brach and Fraserirector, 2000).

Shared decision-making: Inviting patients to actively participate in their care by involving them in the decision-making process is fundamental to patient-centered care. Healthcare providers should consider cultural preferences and values while discussing treatment options and making healthcare decisions (Epstein and Street, 2011).

Respect for patient autonomy: Respecting patients' autonomy and individual values is essential. Future healthcare systems should encourage healthcare providers to engage in shared decision-making and support patients' choices even when they differ from the provider's own cultural beliefs (Weil, 2009).

Culturally competent care teams: Healthcare organizations should strive to build diverse care teams that reflect the cultural backgrounds of their patient populations. This diversity can enhance cultural competence and improve communication and understanding between healthcare providers and patients. By having a diverse team, healthcare organizations can tap into a range of cultural perspectives and provide more personalized care (Betancourt, 2006).

Training and education: Healthcare professionals should receive ongoing training and education on cultural competence and patient-centered care. This training should focus on developing skills in understanding and respecting cultural differences, addressing implicit biases, and promoting cultural humility. By investing in training programs, healthcare organizations can ensure that their staff members are equipped with the knowledge and skills necessary to provide culturally competent care (Lie et al., 2011).

Collecting and utilizing cultural data: Healthcare organizations should collect and analyze data related to patients' cultural backgrounds and experiences. This data can help identify healthcare disparities and inform interventions to improve healthcare

equity. Understanding the cultural factors that influence health outcomes can guide the development of targeted interventions and strategies to address health disparities (Betancourt et al., 2002).

Community engagement and partnerships: Building strong partnerships with community organizations and leaders can help healthcare organizations better understand the needs and preferences of the communities they serve. By actively engaging with community members, healthcare providers can develop culturally appropriate programs and services that align with the community's values and beliefs (Institute of Medicine (US) Committee on Quality of Health Care in America, 2001).

Technology and telehealth: Advancements in technology and telehealth present opportunities to provide culturally competent care, especially in remote or underserved areas. Telehealth platforms can facilitate access to healthcare services, allowing patients to receive care from providers who understand their cultural backgrounds and needs. Healthcare organizations should ensure that technology is accessible to all populations and consider cultural factors when designing and implementing telehealth services (Rashid and Smith, 2020).

Integrating patient-centered care and cultural competence within healthcare systems can result in improved health outcomes, heightened patient satisfaction, and diminished healthcare disparities. By recognizing and appreciating diverse cultural backgrounds, healthcare organizations have the potential to establish a more inclusive and fair healthcare system that acknowledges and fulfills the needs of every patient.

5. CONCLUSION

In conclusion, the research conducted on the effects of climate change on coastal regions has provided valuable insights into the significant challenges and potential consequences that lie ahead. The findings highlight the urgent need for proactive measures and strategic planning to mitigate and adapt to the impacts of climate change on coastal areas.

Key Findings and Takeaways

Rising sea levels: The study confirms the scientific consensus that sea levels are rising due to climate change, posing a significant threat to coastal communities worldwide. The rate of sea-level rise is projected to accelerate in the coming decades, exacerbating coastal erosion, flooding, and saltwater intrusion (IPCC, 2019).

Increased storm intensity: The research highlights the link between climate change and the intensification of storms, including hurricanes, typhoons, and cyclones. Coastal regions are particularly vulnerable to these extreme weather events, which can result in devastating coastal flooding and erosion (Knutson et al., 2020).

Ecosystem degradation: Climate change is causing significant ecological disruptions in coastal areas, including the loss of coral reefs, mangroves, and wetlands. These ecosystems provide critical coastal protection, habitat for marine life, and other valuable services, and their decline has far-reaching consequences for both the environment and human well-being (Barbier et al., 2019).

Socioeconomic impacts: The research underscores the socioeconomic impacts of climate change on coastal communities. Coastal cities and towns face increased risks to infrastructure, housing, and livelihoods. Displacement, loss of tourism revenue, and food insecurity are among the significant challenges that coastal populations are likely to face (Hallegatte et al., 2013; Neumann et al., 2015).

Adaptation and mitigation strategies: The study identifies the importance of implementing adaptation and mitigation measures to address the impacts of climate change on coastal regions. These include coastal defense infrastructure, land-use planning, ecosystem restoration, and sustainable coastal management practices (Nicholls et al., 2018; Arkema et al., 2015).

Recommendations for Further Research and Practice

Based on the findings of this research, several recommendations can be made for further research and practice:

Enhanced coastal monitoring: Continued monitoring of coastal processes, including sea-level rise, storm activity, and ecosystem health, is crucial for better understanding and predicting the impacts of climate change. This will help inform adaptive management strategies and improve coastal resilience.

Integrated coastal management: Further research should focus on developing and implementing integrated coastal management approaches that consider the ecological, social, and economic dimensions of coastal systems. This holistic approach will facilitate more effective decision-making and coordination among stakeholders.

Community engagement and capacity-building: Research and practice should prioritize community engagement and capacity-building efforts, particularly in vulnerable coastal areas. Empowering local communities with knowledge, skills, and resources will enhance their ability to adapt to climate change and participate in decision-making processes.

Innovative financing mechanisms: Investigating novel methods of financing, including green bonds, collaborations between the public and private sectors, and climate funds, can offer vital funding for bolstering climate change adaptation and mitigation efforts in coastal areas. It is essential to conduct additional research to discover and advocate for these innovative mechanisms. (UNEP, 2020; World Bank, 2022)

Policy and governance: Research should focus on assessing the effectiveness of existing policies and governance frameworks in addressing climate change impacts on coastal areas. Identifying gaps and barriers in current systems will contribute to the development of more robust and adaptive policy frameworks.

By implementing these recommendations, policymakers, researchers, and practitioners can work together to improve our understanding of climate change impacts on coastal regions and develop effective strategies to protect and sustain these valuable ecosystems and communities for future generations. Through the examination of the intersection of novel therapeutic strategies with Igbo-African conceptualization of medicine, this article sheds light on the potential for synergy between traditional knowledge and modern science. By acknowledging the diverse cultural perspectives on healing and healthcare, we can foster a more inclusive and holistic approach to medicine, ultimately benefiting individuals and communities worldwide.

Informed consent

Not applicable.

Ethical approval

Not applicable.

Conflicts of interests

The authors declare that there are no conflicts of interests.

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Data and materials availability

All data associated with this study are present in the paper.

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